

Obituary

KEVIN A. JOHNSON (1968-2013)

On June 24, 2013, the Southern Illinois University Edwardsville (SIUE) community learned of the unexpected passing due to natural causes of Dr. Kevin A. Johnson in Manila, The Philippines, while traveling on vacation to Shanghai, China.

Dr. Johnson was born on December 11, 1968 in Los Angeles, California. He obtained his B.S. from the University of California at Davis in 1992 and his Ph.D. from Clemson University in 1996, with both degrees in Environmental Toxicology. Between 1996 and 1997 he was a Postdoctoral Research Associate at Washington State University. Dr. Johnson became a faculty member in the Department of Chemistry at SIUE in 1997, reaching the rank of professor in 2008. He occupied a number of administrative positions while at SIUE, including Associate Dean in the College of Arts and Sciences (2006-2010), Interim Director of the Center for STEM (2009-2010), and Director of the Environmental Sciences Program (2010-2013). At the time of his death he had completed all the paperwork to transform that interdisciplinary program into a full-fledged department, not a small undertaking. As an Associate Dean, Dr. Johnson also worked on proposals to initiate two undergraduate degrees in Forensics (Field and Laboratory), two undergraduate degrees in Environmental Sciences (Health and Toxicology), and on an interdisciplinary Working Group to create Baccalaureate of Health Sciences degrees while drafting a plan for the degrees to evolve into a new School of Health Sciences.

Dr. Johnson received full recognition from the university community for his seven years of work towards the construction of a new science building and renovation of the old one. The former is a state of the art LEED Certified facility which was completed in 2013 to house faculty and staff from the departments of Biological Sciences, Chemistry and Environmental Sciences. The renovation of the old building is scheduled to begin in late 2013 and will house the departments of Mathematics and Physics as well as the STEM Center.

As a researcher, Dr. Johnson distinguished himself as a nationally and internationally recognized expert on contaminant movement, degradation, and effects on the environment. He developed a number of methods of passive sampling devices, evaluation of factors affecting the bioavailability of contaminants in soils, as well as the extraction and instrumental analysis of contaminants in traditionally difficult matrices. He was recently working on the use of critical body residues in ecological risk assessments in lieu of standardized toxicity data, method development of a novel extraction technique in



turtle blood and its use as a biomonitoring technique for pharmaceuticals. He also worked on the environmental fate, mass transport, ecotoxicity of insecticide exposure to wildlife, and bioaccumulation of contaminants, as well as the amelioration of co-contaminated point- and non-point source water through the use of vegetative filter strips and/or constructed flow-through wetlands. Several of his research interests were being integrated into collaborative efforts with other colleagues at SIUE and the University of Tennessee at Chattanooga focusing on techniques that can be integrated to perform holistic ecological risk assessments and risk reduction. His research was supported by many grants awarded by multiple agencies. A list of his peer-reviewed publications is in Appendix I.

Dr. Johnson's distinguished career as a teacher concentrated on the subjects of environmental chemistry and toxicology. These efforts were recognized by numerous accolades that included Outstanding Ph.D. Candidate of the Year (1995-1996), Outstanding Instructor of the Year (1995-1996), and the Distinguished Research Award, Sigma Xi, (2000). He also served as member of the Editorial Board for the *Journal of Water, Air, and Soil Pollution* since 1998, and peer-reviewer of the *European Science Foundation* since 2005.

Dr. Johnson was an avid traveller and scuba diver. He is survived by his father, Dohn Johnson, his brother, Dohn Johnson Jr., his sister-in-law, Carol Johnson and his niece and nephews Joshua, Jessica, Dohn III, and Benjamin. His mother, Elizabeth Misner Johnson, preceded him in death.

Aldemaro Romero Jr.
Dean, College of Arts and Sciences
Southern Illinois University Edwardsville

Robert Dixon
Associate Professor, Chemistry Department
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APPENDIX I

Kevin A. Johnson Peer-Reviewed Publications (*student coauthor)

Peer-reviewed Articles Published in Books

- *L. Ruppert, Z.-Q. Lin, R. P. Dixon, and K. A. Johnson. 2007. Identification of Volatile Arsenical Compounds Produced During Phytoremediation Using a Novel Sampling and GC-MS Technique. In Zhu, Y., N. Lepp, and R. Naidu, Eds., *Biogeochemistry of Trace Elements: Environmental Protection, Remediation, and Human Health*, Tsinghua University Press, Beijing, China: pp 873-4. (ISBN 978-7-302-15627-7).
- *P. Upadhyaya, R.P. Dixon, D. Duvernell, K.A. Johnson, and Z-Q Lin. 2007. Selenium Volatilization by Soil Bacteria Isolated from Rhizosphere of Rabbitfoot Grass (*Polypogon monspeliensis*). In Zhu, Y., N. Lepp, and R. Naidu, Eds., *Biogeochemistry of Trace Elements: Environmental Protection, Remediation, and Human Health*, Tsinghua University Press, Beijing, China: pp562-3. (ISBN 978-7-302-15627-7).

Peer-reviewed Conference Proceedings

- *Huff, D., Harris, J., Brunkow, P., Johnson, K.A., and Z-Q Lin. 2010. Accumulation and distribution of arsenic in pond snail and fish with different feeding strategies and effects of phosphorous contamination in wetland microcosms. In: *Arsenic in Geosphere and Human Diseases*. Jean and Bhattacharya (eds.). Taylor and Grancis Group, London. pp 204-5.
- *Lipe, S., Webb, S, Brewer, D, Johnson, K, and Z-Q Lin. 2005. Biological Transformation and Volatilization of Arsenic in a Soil-Rabbitfoot Grass System. *Proceedings of the 8th International Conference on the Biogeochemistry of Trace Elements*, Adelaide, Australia. 126-127.
- *Tryfonas, A.,Tucker, J., Brunkow, P., Johnson, K., Hussein, M., and Z-Q Lin. 2005. Bioaccumulation of Tin in Eggs of the Red-eared Slider (*Trachemys scripta elegans*) from the Lower Illinois River.

Proceedings of the 8th International Conference on the Biogeochemistry of Trace Elements, Adelaide, Australia. 428-429.

Johnson, K. A., Hooper, M. J. and C. P. Weisskopf. 1997. The use of passive sampling devices (PSDs) to determine soil contaminant concentrations. In *Proceedings of the 1996 Pacific Basin Conference on Hazardous Waste*; Kuala Lumpur, Malaysia; November 4-8. pp 517-26.

Peer-reviewed Papers

- *Shaul, N., Richards, S., Adair, D., and K.A. Johnson. Polychlorinated Biphenyls, Chlorinated Insecticides, Polycyclic Aromatic Hydrocarbons and Polybrominated Diphenyl Ethers in Human Placental Tissue. *Journal of Environmental Pollution*. (submitted; Environmental Pollution).
- *Hussar, E., S. Richards, Z.-Q. Lin, R.P. Dixon, and K.A. Johnson. 2012. Human Health Risk Assessment of 16 Priority Polycyclic Aromatic Hydrocarbons in Soils of Chattanooga, Tennessee, USA. *Water, Soil, and Air Pollution*. 223(9): 5535-5548.
- *Ruport, L., Dixon, R. P., Lin, Z-Q and K.A. Johnson. 2012. Development of a solid phase microfiber extraction sampling technique to monitor volatile organoarsinicals emitted during phytovolatilization. *Journal of Hazardous Materials*. <http://dx.doi.org/10.1016/j.jhazmat.2012.06.046>.
- *Lipp, S.B., *Lusk, M., Webb, S., Johnson, K.A., and Z-Q. Lin. Biotransformation and Volatilization of Arsenic in a Soil-Rabbitfoot Grass (*Polypogon monspeliensis*) System. *Journal of Hazardous Materials*. (submitted).
- *Keller, S., Zhang, T.Q., Webb, S., Brugam, R., Johnson, K. and Z-Q Lin. 2008. Effects of suburban land use on phosphorous fractions and 2 speciation in the upper Peruque Creek, Eastern Missouri. *Wat. Environ. Research*. 80:316-323.
- *Strum, K.M., Alfara, M., Haase, B., Hooper, M.J., Johnson, K.A., Lanctot, R.B., Lesterhuis, A.J., Lopez, L., Matz, A.C., Morales, C., *Paulson, B., Sandercock, B.K., Tores-Dowdall, J. and M.E. Zaccagnini. 2008. Plasma cholinesterases for monitoring pesticide exposure in neotropical migratory shorebirds. *Ornitologia Neotropical* 19:641-651.
- *Bikram Shrestha, *Shawn Lipe, Kevin Johnson, Tiequan Zhang, William Retzlaff, and Zhi-Qing Lin. 2006. Soil Hydraulic Manipulation and Organic Amendment for the Enhancement of Selenium Volatilization in a Soil-Pickleweed System. *Plant and Soil*. 288:189-196.
- *Tryfonas, A. E., J.K. Tucker, P.E. Brunkow, K.A. Johnson, H.S. Hussein, and Z.-Q. Lin. 2006. Metal accumulation in eggs of the red-eared slider (*Trachemys scripta elegans*) in the Lower Illinois River. *Chemosphere*. 63:39-48.
- *Smith, P. N., Johnson, K. A., Anderson, T. A. and McMurry. 2003. Environmental Exposure to Polychlorinated Biphenyl among Raccoons (*Procyon lotor*) at the Paducah Gaseous Diffusion Plant, Western Kentucky. *Environmental Toxicology and Chemistry*. 22:406-416.
- *Smith, P. N., Bandiera, S. M., Skipper, S. L., Johnson, K. A. and S. T. McMurry. 2003. Environmental Polychlorinated Biphenyl Exposure and Cytochromes P450 in Raccoon (*Procyon lotor*). *Environmental Toxicology and Chemistry* 22:417-423.
- *Grabowski, L. A., Houppis, J. L. J., Woods, W. I. and K. A. Johnson. 2001. Seasonal bioavailability of sediment-associated heavy metals along the Mississippi River. *Chemosphere* 45:643-651.
- *Awata, H., Johnson, K. A. and T. A. Anderson. 2000. Passive sampling devices as surrogates for evaluating bioavailability of aged chemicals in soil. *Toxicological and Environmental Chemistry*. 73:25-42.
- DeClue, M.E., Johnson, K., Hendrickson, H. and P. Keck. 2000. Stimulate High School Science Fair participation by connecting with a nearby College. *Journal of Chemical Education*. 77:608-609.
- Naddy, R. B., Johnson, K. A. and S. J. Klaine. 2000. Response of *Daphnia magna* to pulsed exposures of chlorpyrifos. *Environmental Toxicology and Chemistry*. 19:423-431.
- *Johnson, M., Houppis, J., Johnson, K., Schulz, K., Smith, M. and *G. Paul. 1998. Phytoextraction of cadmium by *Pinus taeda*. Air and Waste Management Association 98-RAD.02P Pittsburgh, PA. 5p.
- *Karen, D. J., *Joab, B. M., *Wallin, J. W. and K. A. Johnson. 1998. Partitioning of chlorpyrifos between water and an aquatic macrophyte (*Elodea densa*). *Chemosphere*, 37:1579-1586.

- Mortensen, S. R., Johnson, K. A., Weisskopf, C. P., Hooper, M. J., Lacher, T. and R. J. Kendall. 1998. Avian exposure to pesticides in Costa Rican banana plantations. *Bulletin of Environmental Contamination and Toxicology*, 60:562-568.
- Johnson, K. A., Harper, F. D. and C. P. Weisskopf. 1997. Solid-phase extraction of aldicarb and its metabolites from water and soil. *Journal of Environmental Quality*, 26:1435-1438.
- Lacher, T. E., Mortensen, S. R., Johnson, K. A. and R. J. Kendall. 1997. Pesticide use and wildlife risk on banana plantations. *Pesticide Outlook*, 8:24-28.
- Johnson, K. A. (1996). Passive sampling of soil chemical vapors for contaminant characterization. Ph.D. dissertation. Clemson University, Clemson, S.C.
- Johnson, K. A., Naddy, R. B. and C. P. Weisskopf (1995). Passive sampling devices for rapid determination of soil contaminant distributions. *Toxicological and Environmental Chemistry*, **51**:31-44.